

teampay &
The Siemens Healthineers
Digital Ecosystem

Dr. Thomas Friese
March 2018

Digitalization has transformed diagnostic imaging 40+ years of innovation

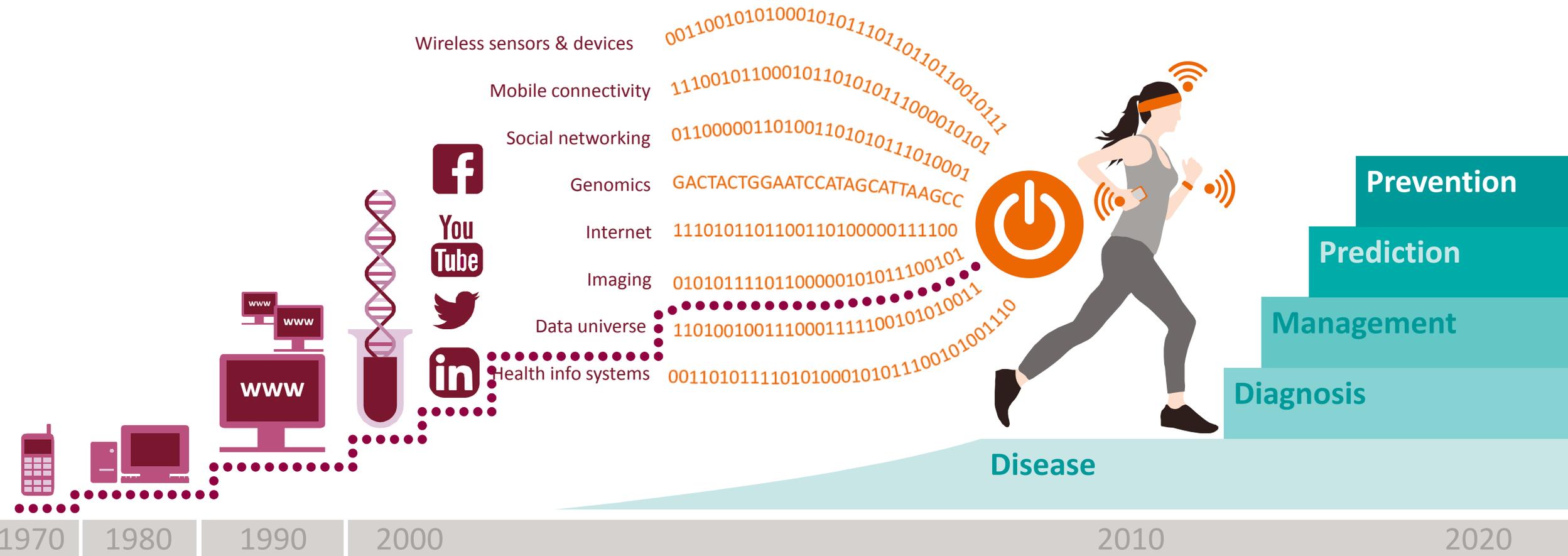


Data courtesy of Israelitisches Krankenhaus, Hamburg, Germany
Cinematic Rendering: Research use only. Not for clinical use

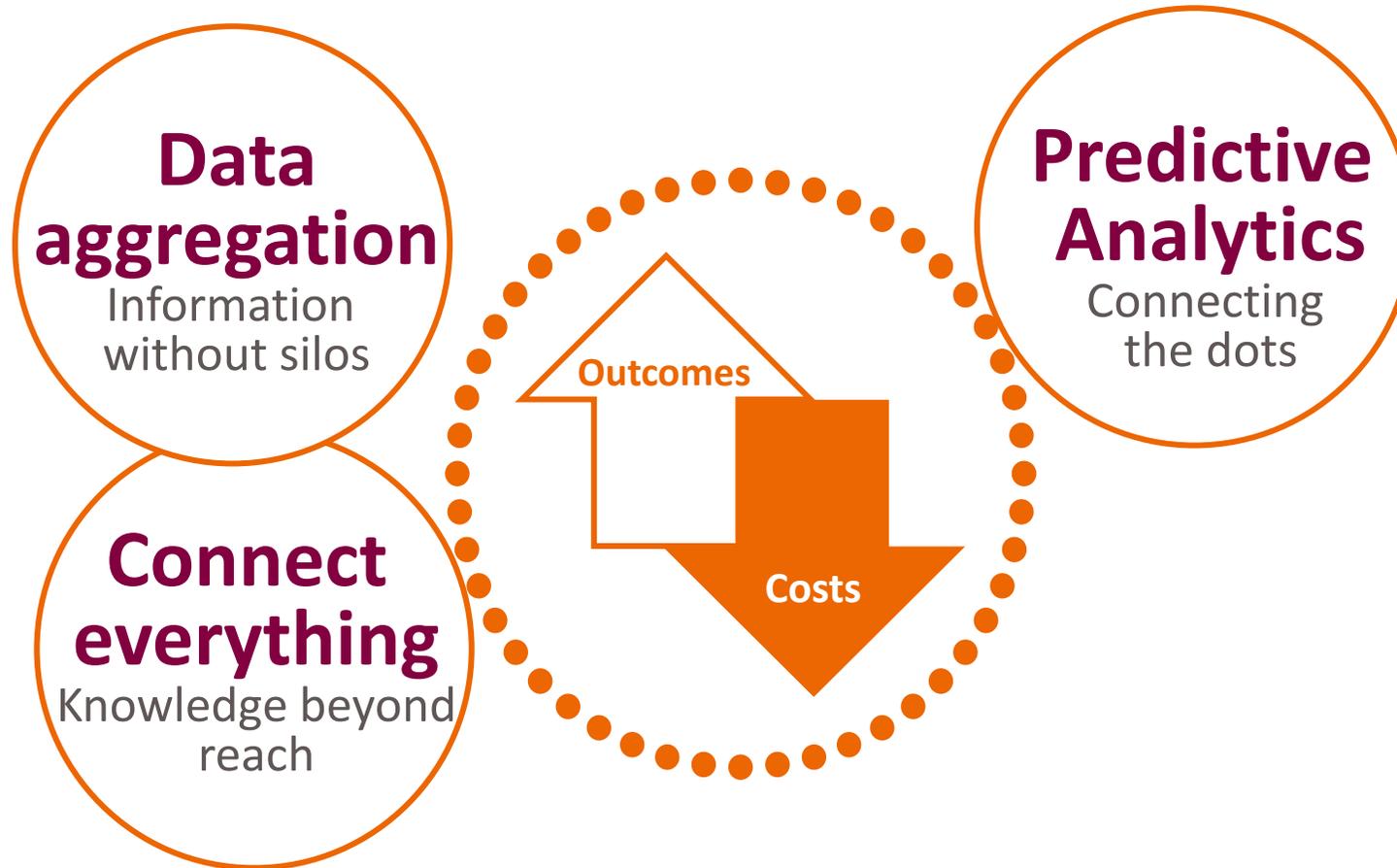
Why digital technology drives healthcare towards a “super-convergence”

Acceleration of Digital Technology

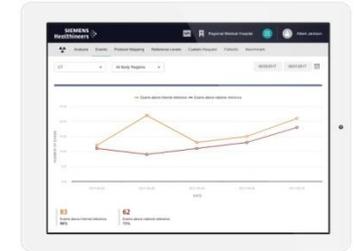
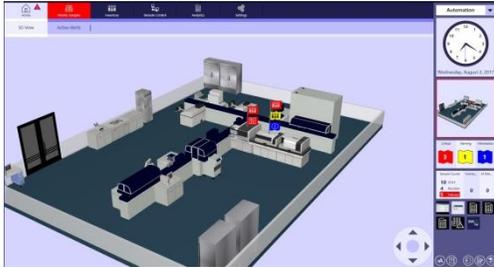
Results



Digitalization is key to the transformation to value based care



Addressing every step in the transformation journey to healthcare digitalization



Generate

Capture the transformational value of your lab and imaging diagnostics data¹

Aggregate

Enhance the value of your data by increasing interoperability and connecting with more stakeholders

Analyze

Leverage AI to cultivate big data and gain relevant, accurate and timely insights

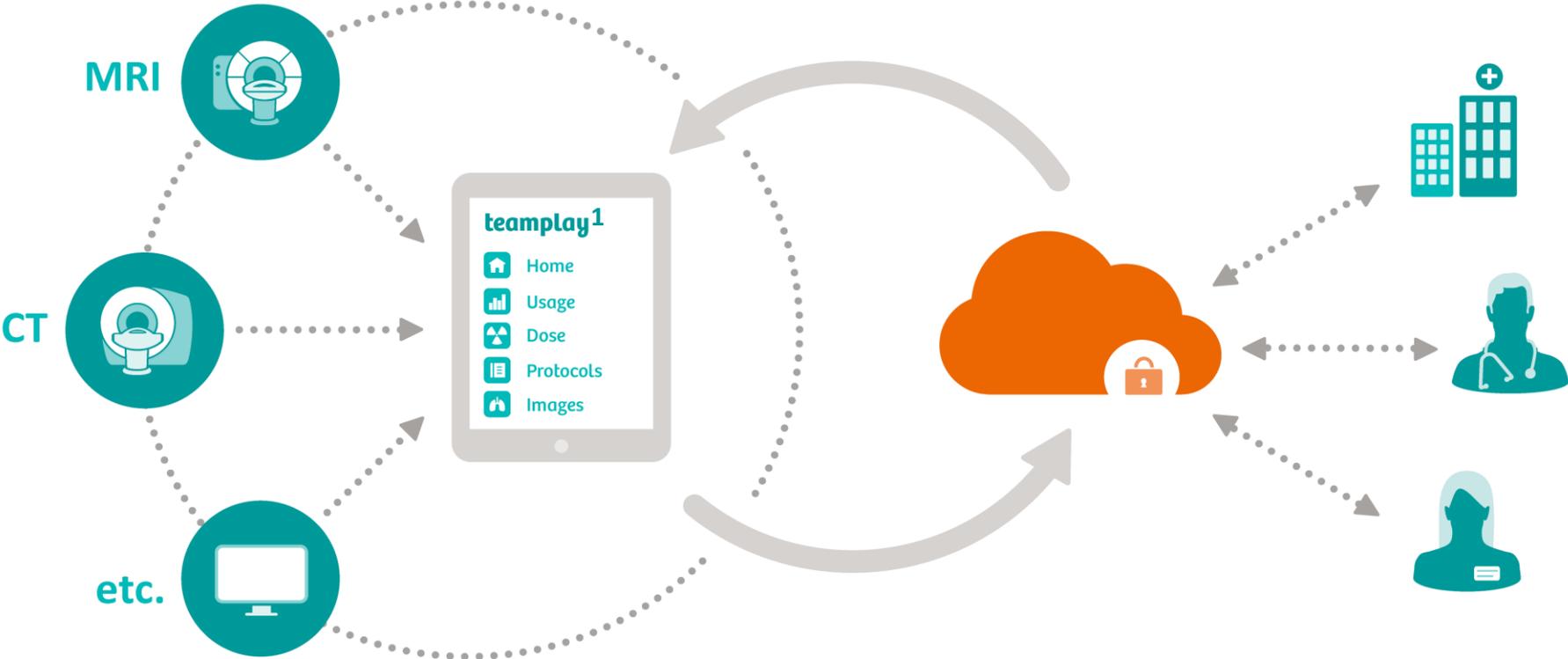
Operationalize

Realize value-based decision making by addressing end user needs and gaining stakeholder advocacy

←..... Data security, privacy, & governance→

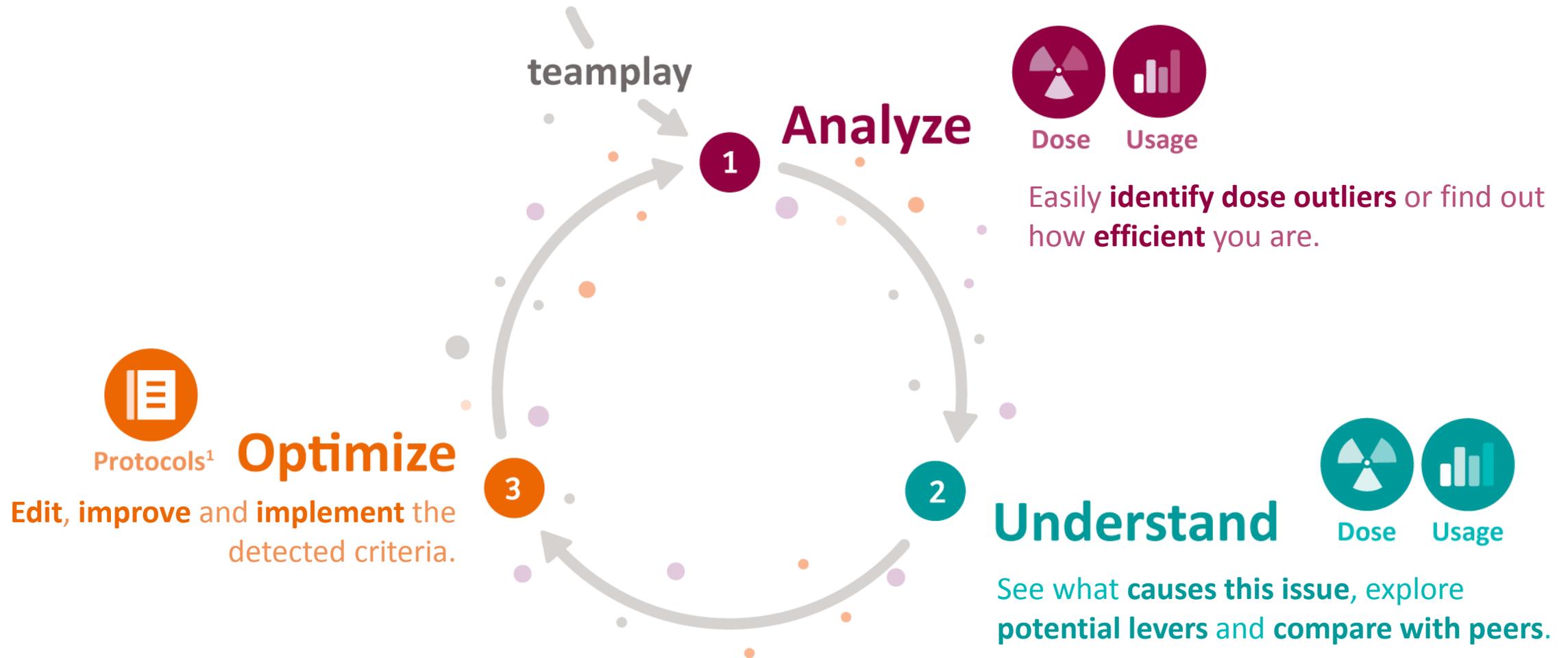
1) Images depict the text version Atellica™ PM 1.0 Software. Under development. Not available for sale. Product availability varies by country.

Digitalization at work – we already started to build a cloud based global network of digital services



¹ teampay is not commercially available in all countries. . If the service is not marketed in countries due to regulatory or other reasons, the service offering cannot be guaranteed. Please contact your local Siemens organization for further details.

Increase your efficiency with teamplay by following the improvement cycle



¹ teamplay Protocols supports selected Siemens scanners. Please contact your Siemens representative for more details.

Doubly tested, twice certified

Because your privacy is important to us

teampay comes with **different data privacy levels** to support compliance with local regulations.

- teampay¹ has been awarded with the **European Privacy Seal** and the German **“Seal of Privacy for IT products”** of the Independent Centre for Privacy Protection in Schleswig-Holstein (ULD).
- Users can be sure that **processing of patient data is in line with German and EU data protection law** and teampay supports the US requirements of **HIPAA**.²



¹ teampay CORE applications: teampay Dose, teampay Usage and teampay Protocols

² Supporting HIPAA (Health Insurance Portability and Accountability Act) compliance.

11/1/2017

12/16/2017



Dose Target

Exams within target



Percentage of all exams

+0.2%

Dose Events

above internal reference



Number of Exams

+0%

Dose Events

above national reference



Number of Exams

+19.7%

Patients & Exams

7,548

Number of patients

9,875

Number of exams

Exam Duration

12:44

min

duration

Patient Change Time

26:44

min

time

Today's Open Orders

Cardio



Incomplete Reports

Cardio



Contrast

Cardio

52% Visipaque

48% Omnipaque



Overview

Patients

Examinations

Utilization

Scanner List

Filters



11/1/2017

12/16/2017



Modalities



- All modalities
- CR
- CT
- DX
- MG
- MR
- NM
- PT
- US
- XA

Body regions



Categories



Weekdays



Apply

Cancel

Distribution

Scanners

27

Body Regions

88

Exams in total | Exams per hour | Exam duration | Exam duration median

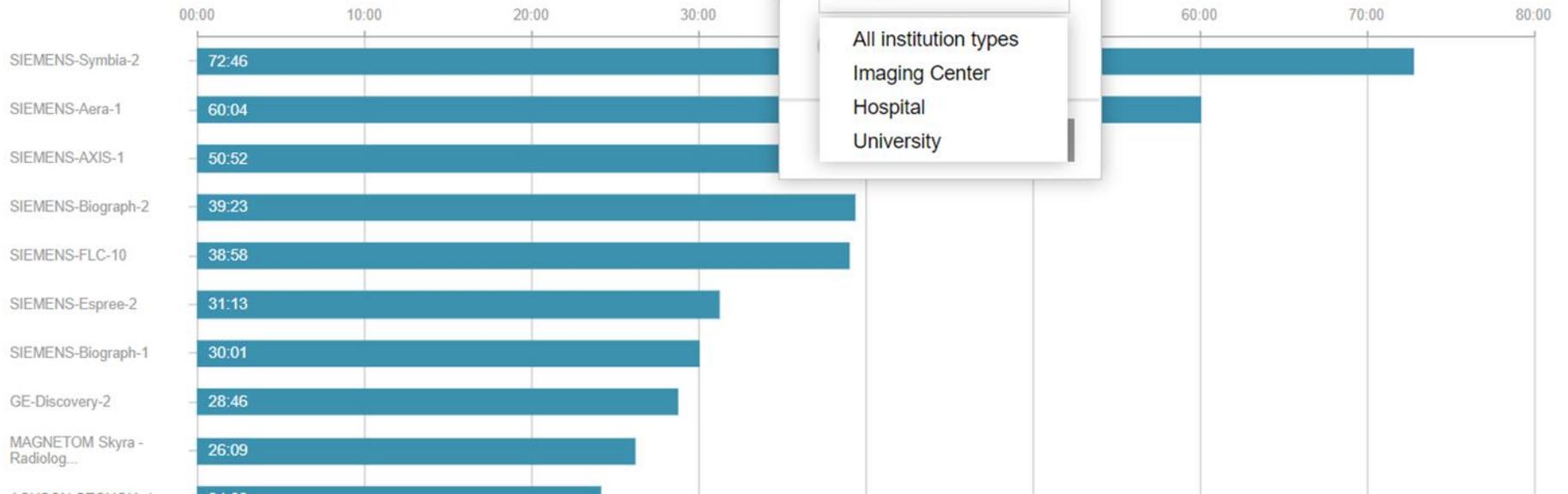
Benchmark

Contrast agent

Sort by all Exams

Export graph

All Exams





Overview

Patients

Examinations

Utilization

Scanner List

11/1/2017

12/16/2017



Filters



Modalities



- All modalities
- CR
- CT
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Body regions



Categories



Weekdays



Apply Cancel

Distribution

Scanners

27

Body Regions

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Exams in total | Exams per hour | Exam duration | Exam duration median

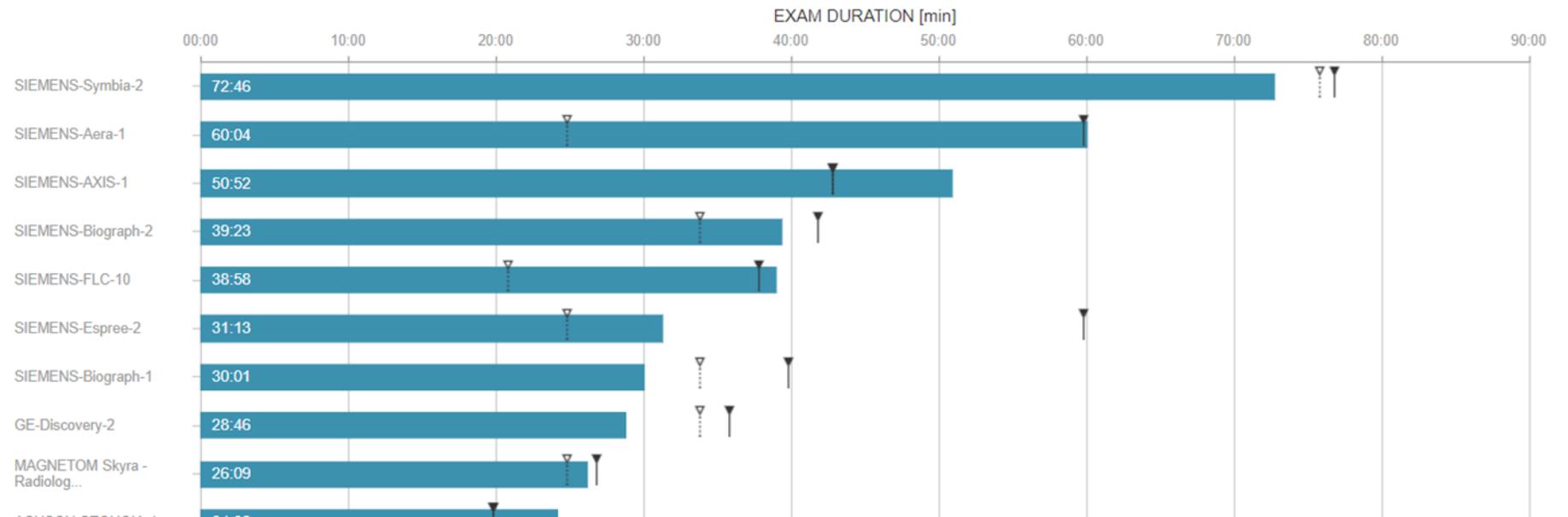
Benchmark

Contrast agent

Sort by all Exams

Export graph

All Exams B. manufacture model B. modality type





Filters



Period

2017Q4

Modality Type

- CT
- XR
- NM
- MG
- PT
- XA

Unit Type

- All Unit Types
- SSDE (MAX)
- CTDIvol (MAX)
- DLP (MAX)
- DLP (ACC)

Apply

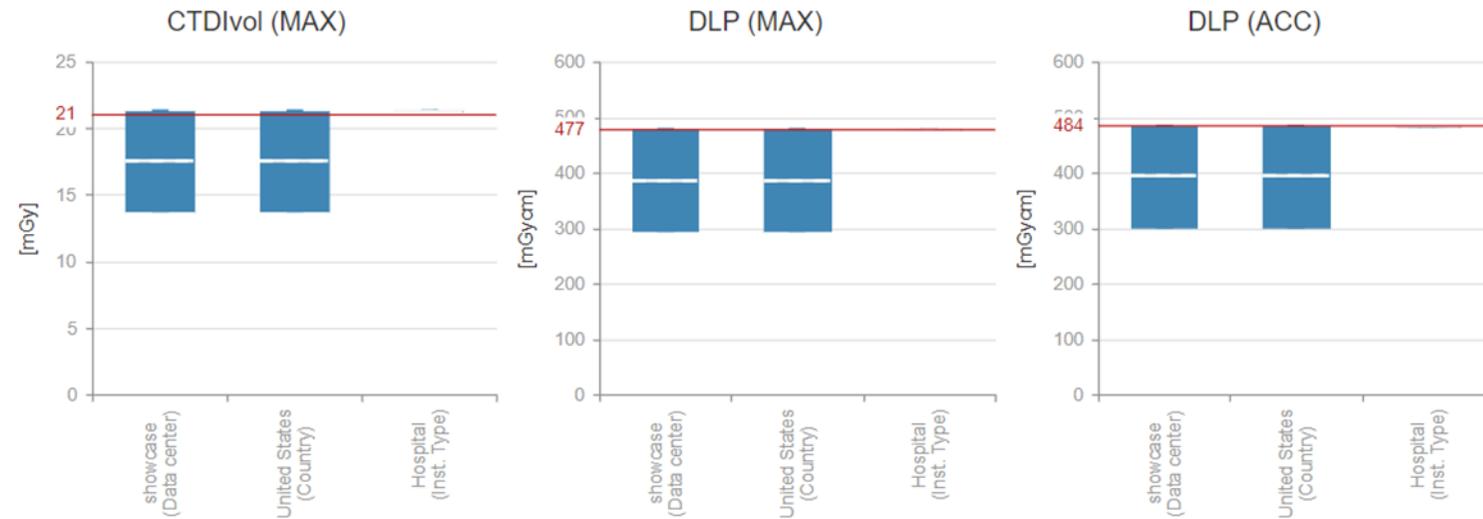
Cancel

Benchmark

Period displayed: 2017Q4

RPID37 – CT Neck wo (Adult)

■ Benchmark value — Your value (median)



RPID16 – CT Chest wo (Adult)

■ Benchmark value — Your value (median)



We already started building a global cloud-based network with >1900 institutions connected



Data acquired for Active systems, # of studies and manufacturers: 13.03.2017 Timeframe: Cumulated numbers since March 2016 Source: teamplay Operations Logging

¹ Prerequisites include: connection to a network, meeting recommended minimum hardware or browser requirements, and adherence to local data security regulations.

² Modalities change identity based on scan-mode, product heuristics apply to consolidate IDs, current heuristics may over-estimate by ~10%

³ Dose studies typically overlap with Usage studies, there is a small number of dose report only studies (not counted in Usage studies)

Consulting-Example: Asset planning

CT Utilization Data Overview (1/2) SENSATION 64

Example

Customer Profile / Comparison

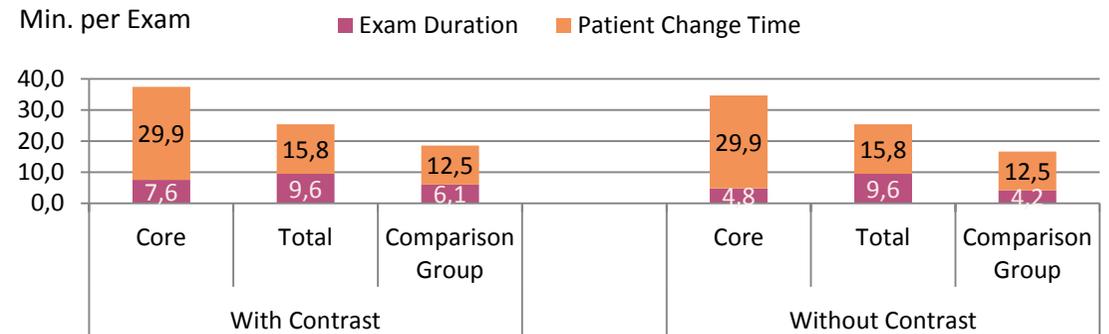
Customer data	Name	xxx
	City	xxx
	Serial Number	1234
	Receiver Serial Number	123456789

		Your System	Comparison Group
Comparison Group World Top 10%	System Group	SENSATION 64	SENSATION 64
	Institution Type	Imaging Center	Imaging Center
	Year/Month	04.2016 .. 06.2016 (3)	

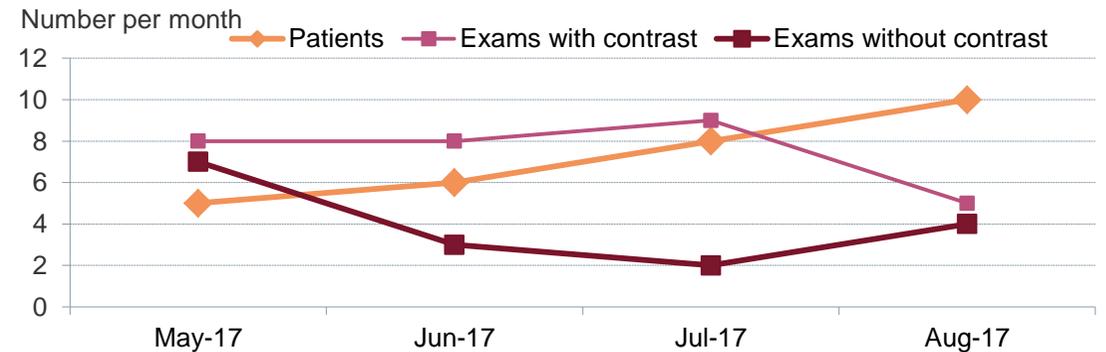
Basic Utilization Data

	Core	Total	Comparison Group
Number of working days p.m.	19,2	21,1	20,3
Number of working hours p.d.	8,3	7,2	9,0
Number of exams p.d.	70,3	53,0	50,0
Number of exams p.h.	9,5	7,6	5,6
Avg. exam duration in min.	6,7	8,6	5,2
Avg. patient change time in min.	5,4	8,2	4,0
Core time	7am - 7pm	12am - 12am	12am - 12am

Time



Scan Volume



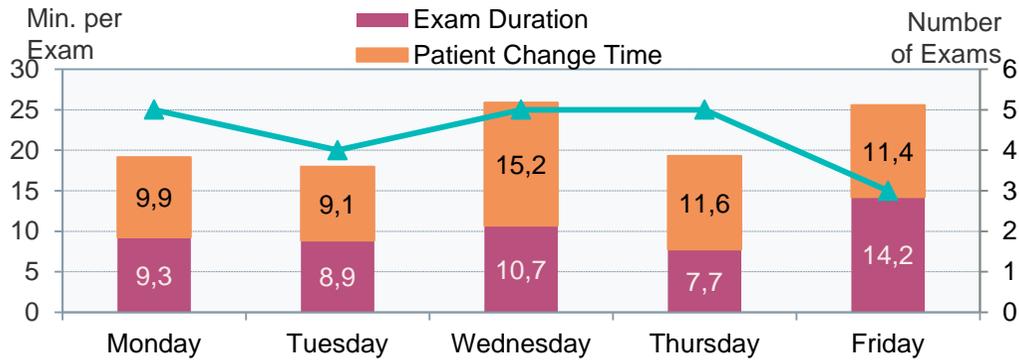
Back

Consulting-Example: Asset planning

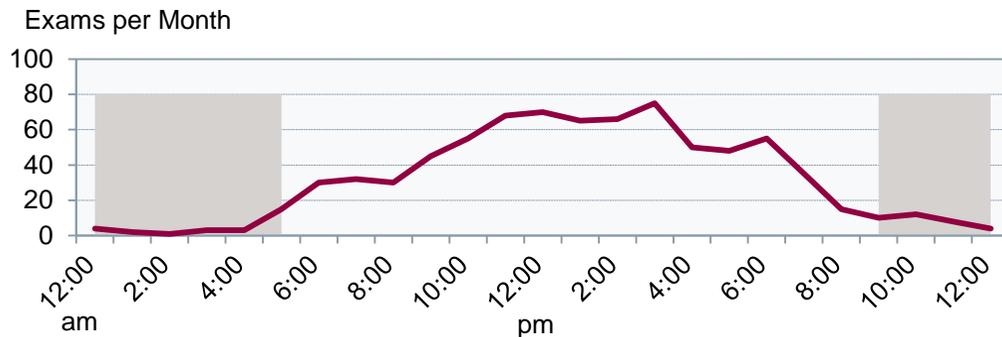
CT Utilization Data Overview (2/2) SENSATION 64

Example

1 Distribution by Day of Week

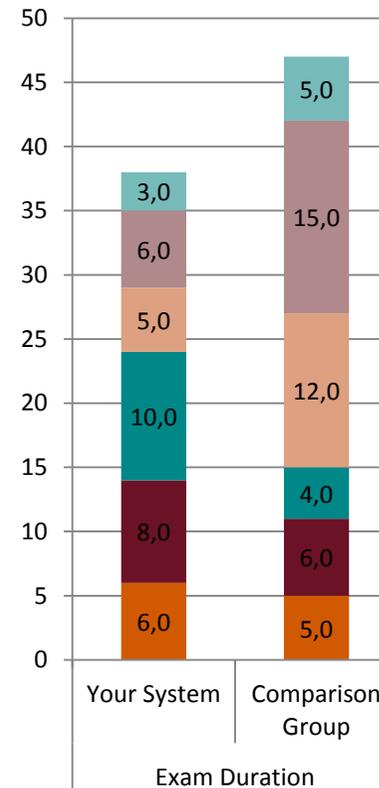


🕒 Exams by Hour of Day

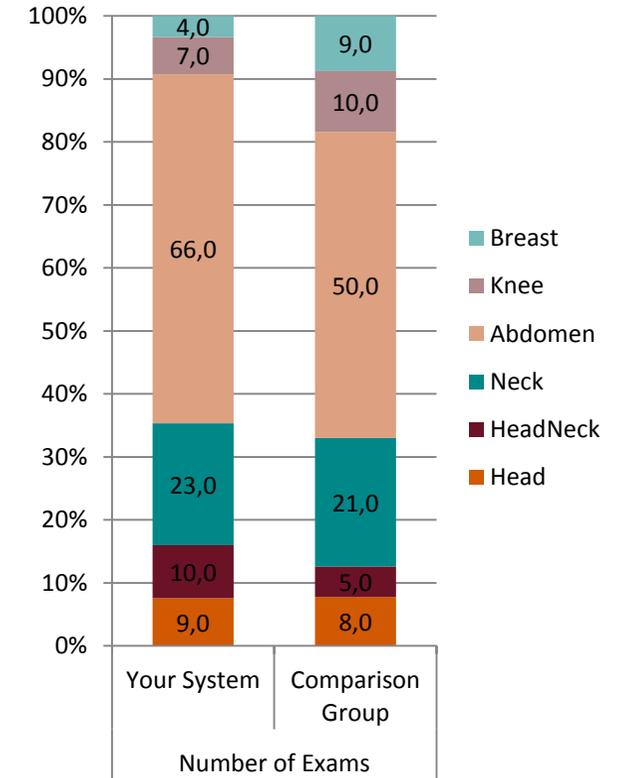


📄 Body Region Profile

Min. per Exam

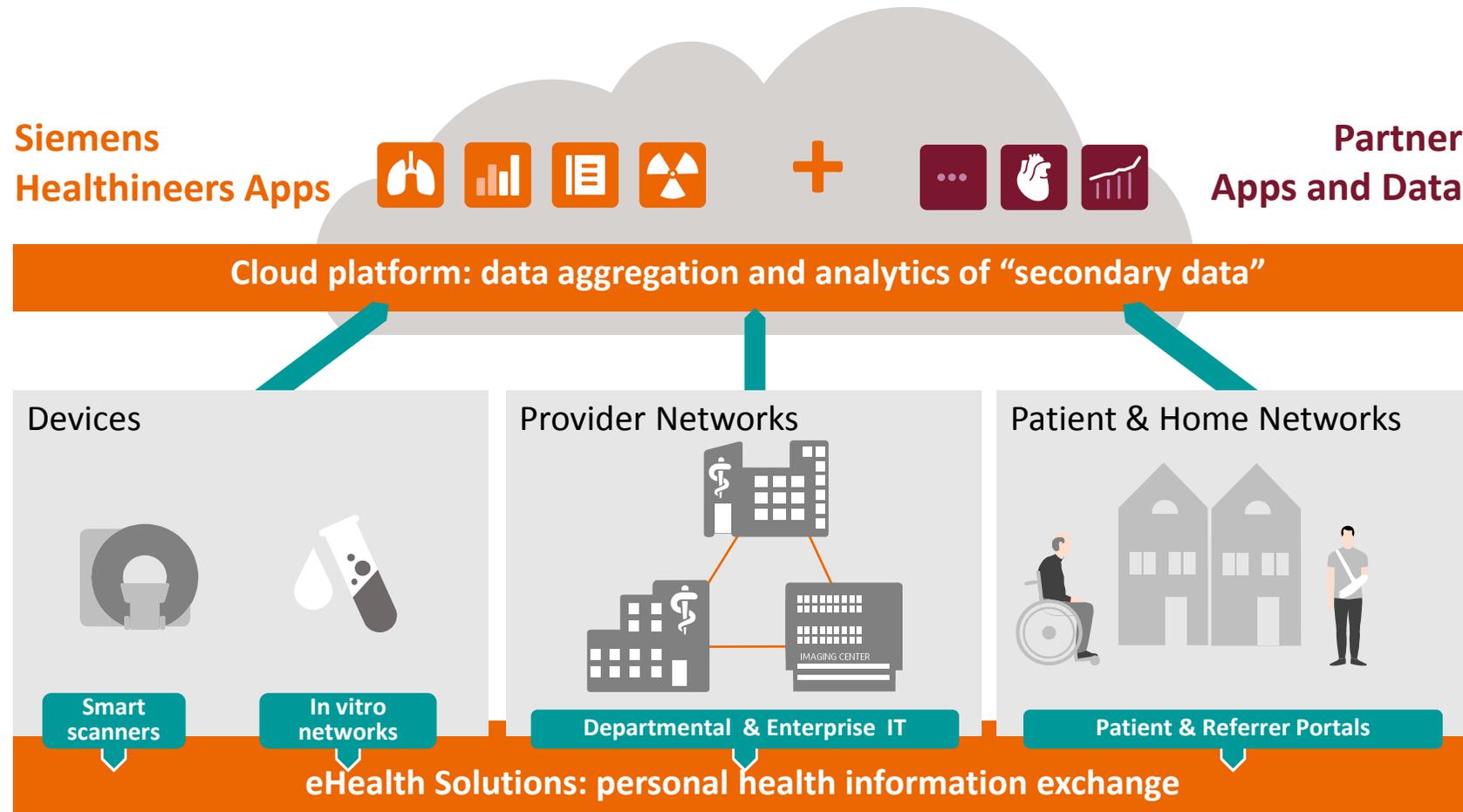


Number of Exams



Siemens Healthineers Digital Ecosystem

Open and secured environment for digitalizing healthcare

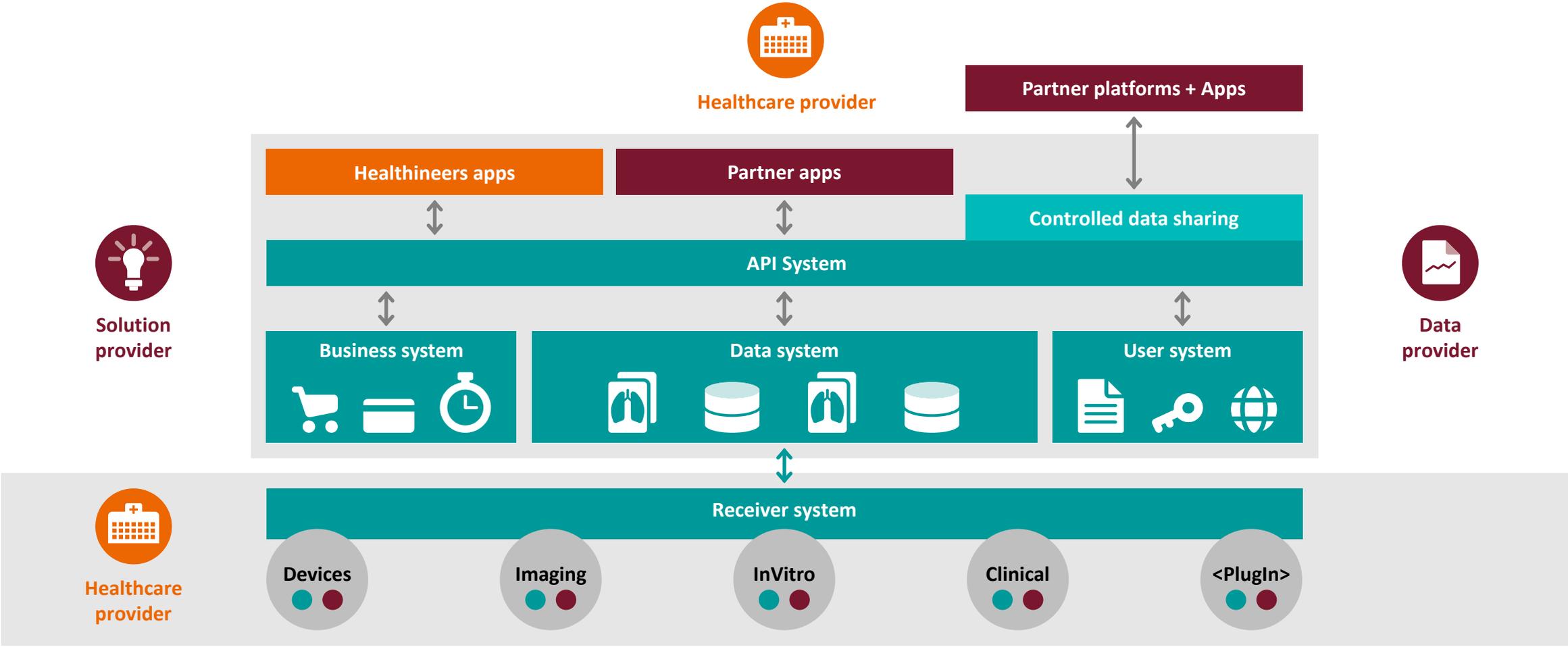


Siemens Healthineers Digital Ecosystem

A growing spectrum of digital offerings



Siemens Healthineers Digital Ecosystem Architecture model view



The components mentioned in this illustration are not fully integrated into the Siemens Healthineers Digital Ecosystem yet and rather point out to future possibilities.

Shared capabilities for fast and easy access to actionable insights



Apps for Mountain Springs Medical Center

- Dashboard
- teamplay Dose
- teamplay Usage
- teamplay Images
- teamplay Protocols
- teamplay Cardio
- teamplay Rad
- Arterys
- HeartFlow
- mediCAD
- Stroll Health
- ExplORer Surgical
- Cranberry Peak
- cNeuro
- Precision Image Analysis
- AMRA® Profiler Research
- Proactive Follow-up
- Users/Roles
- Institution settings
- License
- Fleet Management
- Receivers
- Categories
- Help



Store

Number of patients

9,875

Number of exams

12:44
min

duration

26:44
min

time

Today's Open Orders
Cardio

0

Incomplete Reports
Cardio

—

Contrast
Cardio

52% Visipaque
48% Omnipaque

Welcome to the Store

Browse all digital offerings from the Siemens Healthineers Digital Ecosystem



Application family
All products

Manufacturer
All manufacturers

Installation type
All types

Sort by
Date desc.



AMRA® Profiler Research

Cloud Body Composition MRI
Imaging Quantification

Precise 3D-volumetric fat & muscle measurements from a single 6-minute whole body MRI scan



cNeuro® cMRI

Neurology MRI Image segmentation
Cloud

Enabling quantitative interpretation of brain MRI



ezCDS by Cranberry Peak

PAMA/MACRA/AUC AI
Clinical Decision Support Mechanism

ezCDS is designed to provide AUC/PAMA/MACRA compliance, while minimizing the administrative burden f...



PIA: Post Processing

Post Processing Outsourced Services
Cardiac Vascular Neuro

Precision Image Analysis (PIA): Image Post Processing-as-a-Service. No Software or Training. Just expert...



mediCAD Web

mediCAD is a web based orthopedic planning solution developed and sold by mediCAD Hectec GmbH 1)

Request Quotation

Request trial



What is it?

mediCAD is the web based orthopedic planning solution of mediCAD - the globally most successful and recognized orthopedic planning software on the market. Currently available for orthopedic preoperative hip and knee planings and access to more than 500.000 templates from over 130 implant manufacturers. mediCAD helps ensure a high level of planning and operational quality and supports to determine, display, calculate, and document the most effective alternatives and reveal useful information before surgery. Clear benefits are Simple dimensioning - mediCAD provides an easy pre- and postoperative dimensioning of joint axes.



All Studies

Inbox

Upload Study



About



You shared this study with Fields, Sarah and you.

Herz^Cardiac_M2_Standard (Erwachsener)

Share study

Patient ID: FO_114 Name: FO_CorCTA_Seq_calcif_Plaq... DoB: 1/1/1956

Modality type: CT Study date: 3/4/2018

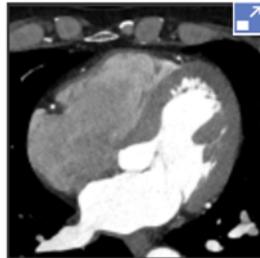


Study

Data Sheet

Conversations

Series (1)



424 images
CT - HEART
DS_CorAdSeq 0.6 Bv...
Cardiac_M2_Standard

Send to HeartFlow

Open in HeartFlow

- Add file to study
- Export...
- Remove study
- AMRA® Profiler Research...
- Arterys...
- cNeuro...
- Cranberry Peak...
- HeartFlow...
- mediCAD...
- Precision Image Analysis...

All Studies

Study date

3/14/2000

3/20/2018



Filter & Search

Options +

FFRct

Search



Studies | Studies by patient

2 of 2 by Study date



TCCORONARIAS Sent
3/4/2018, CT, HEART
ED_Card_Thr_Abd (58Y)

Herz^Cardiac_M2_Standard... Sent
3/4/2018, CT, HEART
FO_CorCTA_Seq_calcif_Plaque^E...

Download study



All Studies

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Share study

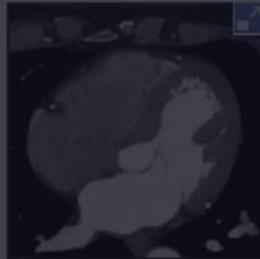
Patient ID: FO_114 Name: FO_CorCTA_

Modality type: CT Study date: 3/4/2018

Study

Data She

Series (1)



424 Images
CT - HEART
DS_CorAdSeq 0.6 Bv...
Cardiac_M2_Standard

Download study

Please note...

You are about to be transferred to a website or service offered by a partner of the Siemens Healthineers Digital Ecosystem. Please note, that specific instructions of use for this application might apply.

[Ok](#) [Cancel](#)

Study date

3/14/2000

3/20/2018



Filter & Search

Options +

FFRct

Search



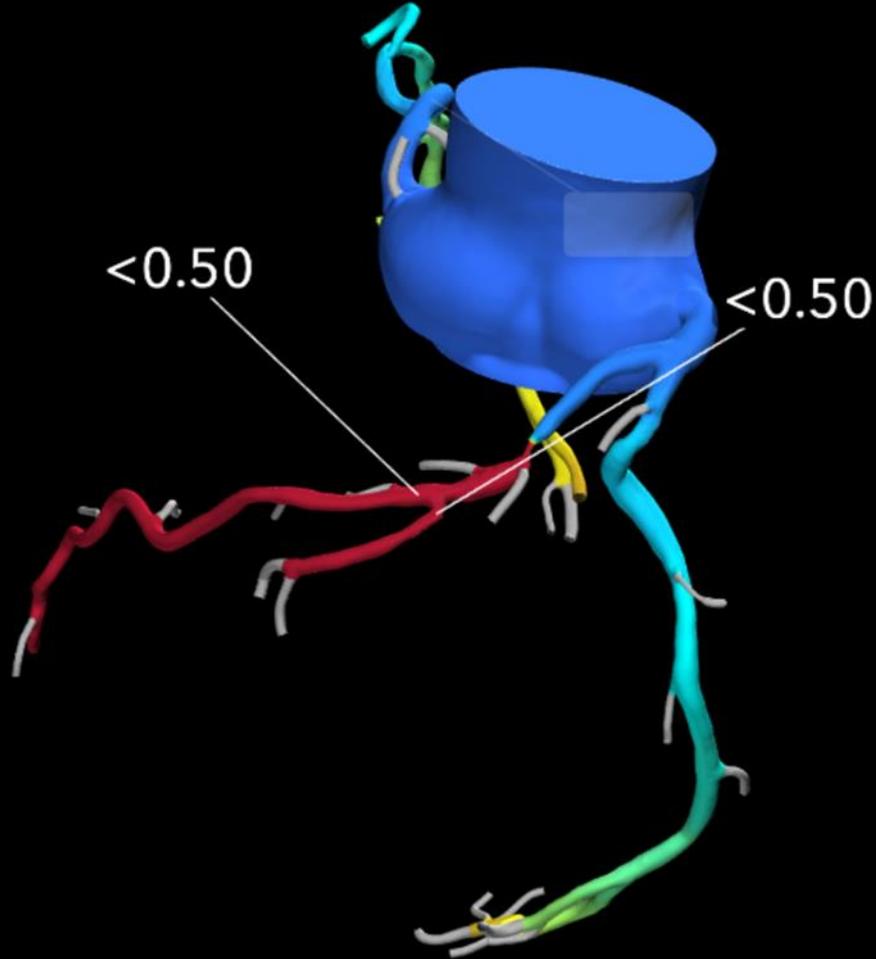
Studies | Studies by patient

2 of 2 by Study date



TCCORONARIAS Sent
3/4/2018, CT, HEART
ED_Card_Thr_Abd (58Y)

Herz^Cardiac_M2_Standard... Sent
3/4/2018, CT, HEART
FO_CorCTA_Seq_calcf_Plaque^E



Info

Patient ID FO_114

CT Study Date 02/27/2014

Referring Physician Cardiac

Institution Mountain Springs Medical Center - RSNA

HeartFlow ID MSMCR-171121-LPGC

CT Series ▶ 9

Download Summary

Settings

Warnings

LPO 76

Cran 58

occlusion



0.00 0.60 0.70 0.80 0.90 1.00

FFR_{CT}



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